

Atty. Docket No. 920070.406
Appl. No. 09/910,669

Patent

REMARKS

Claims 1-27 are all the claims pending in the application. Claims 1-27 were examined and claims 1-8, 10-17 and 19-26 were rejected in the final office action dated December 6, 2004. Specifically, claims 1-5, 10-14 and 19-23 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Wagner et al. (USP 6,002,395); Claims 6-7, 15-16 and 24-25 have been rejected under 35 U.S.C. § 103 as being unpatentable over Wagner et al. in view of Ikemoto (USP 5,969,717); and Claims 8, 17 and 26 have been rejected under 35 U.S.C. § 103 as being unpatentable over Wagner et al. in view of Shimogori (USP 5,973,686). Claims 9, 18 and 27 are objected to but would be allowable if rewritten in independent form.

For the reasons set forth below, Applicant respectfully traverses the rejections and requests favorable disposition of the application.

Argument

Present Invention

As mentioned previously, the invention to which the present application is directed is a system and method for automatically assigning button labels across one or more displayed pages in response to input quantitatively specifying design constraints and tradeoffs. (Par. [0019] of Published Application No. 2002/0036656). More particularly, the invention is a system and method that provides for the inputting of quantitative data which specifies certain constraints that, for example, an expert human multi-function display (MFD) designer might consider when designing a display

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interface. Given the certain inputted data the system is then able to perform certain tasks otherwise performed by the expert MFD designer.

In accordance with one embodiment of the invention, data specifying a geometrical arrangement of two or more buttons for one or more displays is input to the system. Labeling data for the buttons is then input to the system as well as data defining interactions between the labeled buttons. Data is then input that specifies at least one constraint cost with respect to the data that defines the interactions between the labeled buttons and the constraint cost(s) is/are automatically optimized and the button labels are automatically assigned, accordingly.

For example, as disclosed at paragraph [0069] of the published application, the data input with respect to the constraint cost(s) could specify a global-difficulty cost, a pages-to-close-buttons cost, a pages-to-fixed-buttons cost, a path difficulty cost, a pages-to-far buttons cost and a parent-to-child variability cost, etc. Once the data regarding the constraint cost(s) is/are input to the system, an optimization procedure, such as, a gradient descent substantial optimization procedure and a simulated annealing substantial optimization procedure is performed which results in the particular cost being minimized and the button labels being optimized in accordance with the input constraint cost data. Therefore, in accordance with the invention disclosed and claimed in the present application, a non-expert MFD designer is able to design a display interface that automatically optimizes certain predefined constraints. Conventional art design tools such as the ones disclosed in the cited prior art references do not provide this feature and, alternatively, rely on the expertise of the human designer to reach an optimized solution.

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Lack of Recited Elements in the Prior Art

Applicant respectfully submits that the system and method disclosed in Wagner et al. is completely different than that which is disclosed and claimed in the present application. In particular, neither Wagner et al. nor any of the other cited prior art references, alone or in combination, teach or otherwise suggest the method of, or structure for "accepting user input specifying at least one ***constraint cost*** for the defined at least one interaction; and ***automatically assigning the labels*** of the at least two buttons among the two or more buttons on one or more displayed pages ***such that the at least one constraint cost is substantially optimized***", as recited in independent claims 1, 10 and 19.

Applicant has amended the independent claims, 1, 10 and 19, merely for clarification purposes. In particular, the word "automatically" has been inserted in regard to the assignment of the labels. As is clearly disclosed in the specification, the labels are assigned automatically as a result of the optimization of the constraint cost data input by the user.

The prior art of record, specifically, Wagner et al., Ikemoto and Shimogori, either alone or in combination, fails to teach or suggest automatically assigning button labels as a result of optimization of constraint costs.

Lack of Prima Facie Case

It is axiomatic that it is incumbent upon the examiner, in the context of a rejection based on prior art, to specifically point out where each limitation is found in the prior art. Applicant respectfully submits that the examiner has failed to identify where, specifically, the prior art of record discloses "constraint costs", as claimed, that are optimized for the automatic assignment of button labels. If the Examiner is not able to allow the claims as

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presently amended, Applicant requests that specific reference in the prior art references be provided in regard to the claim rejections.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 21-0380. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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